

2004/00099

Sertifikaat

REPUBLIEK VAN SUID AFRIKA

PATENT KANTOOR
DEPARTEMENT VAN HANDEL
EN NYWERHEID



Certificate

REPUBLIC OF SOUTH AFRICA

PATENT OFFICE
DEPARTMENT OF TRADE AND
INDUSTRY

Hiermee word gesertifiseer dat
This is to certify that

the documents annexed hereto are true copies of:

Application forms P.1, P.2 and provisional specification and drawings of
South African Patent Application No.2003/7539 as originally filed in the
Republic of South Africa on 29 September 2003 in the name of GEDDES
ROBERT CHRISTIAN for an invention entitled: " BOX LOCATING
ACCESSORY."

Getekken te
Signed at PRETORIA

in die Republiek van Suid-Afrika, hierdie
in the Republic of South Africa, this

dag van
December 2004
day of

1 Registrars of Patents

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REGISTER OF PATENTS

Official application No.	Lodging date: Provisional	Acceptance date
21 04 2003 7539	22 2003-09-29	47

International classification

51	23
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Full name(s) of applicant(s)/Patentee(s):

71	GEDDES, Robert Christian
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Applicants substituted:	Date registered
71	

Assignee(s):	Date registered
71	

Full name(s) of inventor(s):	
72	GEDDES, Robert Christian

Priority claimed	Country	Number	Date
	33	31	32
	33	31	32
	33	31	32

Title of invention	
54	BOX LOCATING ACCESSORY

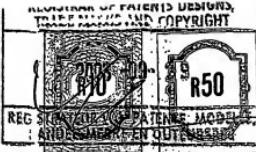
Address of applicant(s)/Patentee(s):	
Dagbreek Farm, OFCOLACO 0854	

Address for service	
74	c/o Institute of Inventors, P.O. Box 286, Saxonwold, 2132

Patent of addition No.	Date of any change
61	

Fresh application based on	Date of any change
P 015 (E)	

REPUBLIC OF SOUTH AFRICA
PATENTS ACT, 1978



APPLICATION FOR PATENT AND ACKNOWLEDGMENT OF RECEIPT

(Section 30 (1) - Regulation 22)

(See notes overleaf)

The grant of a patent is hereby requested by the undermentioned applicant on the basis of the present application filed in duplicate

Official application No. 21 01 • • 2003 / 7539	(i) Applicant's or agent's reference IP 1539
(ii) 71 Full name(s) of applicant(s)..... GEDDES, Robert Christian	
(iii) Address(es) for applicant(s)..... Dagbreek Farm OFCOLACO 0854	
(iv) 54 Title of Invention BOX LOCATING ACCESSORY	
(v) The applicant claims priority as set out on the accompanying form P2	
(vi) This application is for a patent of addition to Patent Application No. 21 1	
(vii) This application is a fresh application in terms of section 37 and based on Application No. 21 1	
(viii) This application is accompanied by: <input checked="" type="checkbox"/> 1 A single copy of a provisional or two copies of a complete specification of 5 pages <input checked="" type="checkbox"/> 2 Drawing of 3 pages <input type="checkbox"/> 3 Publication particulars and abstract (form P 8 in duplicate) <input type="checkbox"/> 4 A copy of Figure.....of the drawings (if any) for the abstract <input type="checkbox"/> 5 An assignment of invention <input type="checkbox"/> 6 Certified priority document(s) (state number) <input type="checkbox"/> 7 Translation of the priority document(s) <input type="checkbox"/> 8 An assignment of priority rights <input type="checkbox"/> 9 A copy of form P 2 and specification of S.A. Patent Application No. 21 01 <input checked="" type="checkbox"/> 10 A declaration and power of attorney on form P 3 <input type="checkbox"/> 11 Request for ante-dating on form P 4 <input type="checkbox"/> 12 Request for classification on form P 9 <input checked="" type="checkbox"/> 13 Special Power of Attorney	
(ix) 74 Address for Service: C/O Institute of Inventors, P O BOX 286, SAXONWOLD, 2132	

Dated this 27 day of September 2003.

INSTITUTE OF INVENTORS & INNOVATORS
SIGNATURE AND DATE

The duplicate will be returned to the applicant's address for service as proof of lodgment but is not valid unless endorsed with the official stamp

Received
REGISTRAR OF PATENTS, DESIGNS, TRADE MARKS AND COPYRIGHT
2003 NO. 29
Registrar of Patents
REGISTRATEUR VAN PATENTE, MODELLE, HANDELSMERKE EN OUTEURSREG

REPUBLIC OF SOUTH AFRICA
PATENTS ACT, 1978

Form P 3

DECLARATION AND POWER OF ATTORNEY

(Section 30 - Regulation 8, 22(1) (c) and 33)

Patent Application Number 21 014 • 2003 / 7539	Ref	Lodging Date 22 2003-09-29
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Full Name(s) of Applicant(s) 71 GEDDES, ROBERT CHRISTIAN

Full Name(s) of Inventor(s) 72 GEDDES, ROBERT CHRISTIAN
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Earliest Priority Claimed	Country	Number	Date
33	31	32	

NOTE: The country must be indicated by its International Abbreviation - see schedule 4 of the Regulations

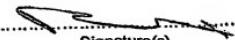
Title of Invention 54 Box LOCATING ACCESSORY

*1 GEDDES, ROBERT CHRISTIAN

hereby declare that:-

- * I am the applicant(s) mentioned above;
- ** I have been authorized by the applicant(s) to make this declaration and have knowledge of the facts herein of the applicant(s);
- *** The Inventor(s) of the abovementioned invention is/are the person(s) named above and the applicant(s) has/have acquired the right to apply by virtue of an assignment from the inventor(s);
- **** To the best of my/our knowledge and belief, if a patent is granted on the application, there will be no lawful ground for the revocation of the patent
- ***** This is a convention application and the earliest application from which priority is claimed as set out above is the first application in a convention country in respect of the invention claimed in any of the claims; and
- ***** 6 the partners and qualified staff of the firm, of the Institute of Inventors, patent attorneys, are authorised, jointly and severally, with powers of substitution and revocation, to represent the applicant(s) in this application and to be the address for service of the applicant(s) while the application is pending and after a patent has been granted on the application.

Signed at Johannesburg this 26th day of SEPTEMBER 2003.


Signature(s)

(no legislation necessary)

- In the case of application in the name of a company, partnership or firm, give full names of signatory/signatories, delete paragraph 1, and enter capacity of each signatory in paragraph 2.
- The applicant is a natural person, delete paragraph 2.
 - If the right to apply is not by virtue of an assignment from the Inventor(s), delete "an assignment from the Inventor(s)" and give details of acquisition of right.
 - For non-convention applications, delete paragraph 5.

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PATENTS ACT, 1978

Form P 6

PROVISIONAL SPECIFICATION
(Section 30 (1) - Regulation 27)

Official Application Number	
21	1 . 2 0 0 3 / 7 5 3 9

Lodging Date	
22	2003 -09- 29

Full Name(s) of Applicant(s)
71 GEDDES, Robert Christian

Full Name(s) of Inventor(s)
72 GEDDES, Robert Christian

Title of Invention
54 BOX LOCATING ACCESSORY

BOX LOCATING ACCESSORY**5 FIELD OF THE INVENTION**

This invention relates to a box locating accessory that is intended to assist in the stacking of boxes in a stable manner so that the stability of a stack of boxes is enhanced. More particularly, but not exclusively, the invention is concerned with enhancing the stability of boxes stacked on a palette to thereby facilitate handling of the palette with a very much diminished possibility of boxes falling off the stack.

It is to be understood that the term "boxes" as used in this specification is intended to include any boxes, irrespective of the material of which they are made, and including, in particular, corrugated cardboard cartons and any other articles shaped in the form of a rectangular parallelepiped.

BACKGROUND TO THE INVENTION

The stacking of boxes, in particular on pallets, is often accompanied by the danger that the boxes become somewhat misaligned in the vertical direction and, furthermore, that they are unstable, at least to some extent, thereby leading to a very real danger that one or more boxes could fall off the stack, particularly when a palette on which they are located is moved using a forklift truck.

A partial solution to the problem, insofar as it relates to pallets, has been to nail an angle section to the palette at each corner so as to locate the corners of boxes that may coincide with the corners of the palette. A strap has, in some cases, been used to encircle the boxes and angle sections at the

corners. As regards elevated layers of boxes, this expedient is difficult to implement and necessitates the use of long lengths of strap.

OBJECT OF THE INVENTION

5

It is, accordingly, an object of this invention to provide a box locating accessory that, in use, will be easy to install and yet contribute significantly to enhancing the stability of stacks of boxes irrespective of whether or not a palette is involved.

10

SUMMARY OF THE INVENTION

In accordance with this invention there is provided a box locating accessory comprising a body having a pair of flanges diverging at right angles to each 15 other and, in a generally central location between the ends of the body, at least one attachment formation having a centre that lies substantially on a line bisecting the right angle between the flanges.

Further features of the invention provide for the attachment formation to be 20 one, or preferably two spaced apertures through a plate secured to the inside surface of the flanges so as to lie in a plane at right angles to the flanges; and for the inside surface of the flanges, at least on one side of the attachment formation, to be provided with a series of projections for operative engagement with the sides of a box to prevent slippage of the said inside 25 surface relative to the box.

In order that the invention may be more fully understood one embodiment thereof as well as its application will now be described with reference to the accompanying drawings.

30

BRIEF DESCRIPTION OF THE DRAWINGS

In the drawings:-

- 5 Figure 1 is a three-dimensional illustration of one embodiment of the invention;
- 10 Figure 2 is a sectional view taken along line II to II in Figure 1 and showing the association of a strap with the attachment formation;
- 15 Figure 3 is an elevation illustrating a stack of boxes in association with which a series of accessories according to the invention has been employed; and,
- 20 Figure 4 is a plan view showing the interrelationship of four accessories according to the invention assembled at the top of a layer of a stack of boxes.

20 DETAILED DESCRIPTION WITH REFERENCE TO THE DRAWINGS

In the embodiment of the invention illustrated in Figures 1 and 2, an accessory according to the invention has a body (1) consisting of two flanges (2) extending at right angles to each other from a corner (3). The length of the accessory is to be operatively upright and accordingly, for ease of description, it will be referred to as the height of the accessory.

Midway up the height of the accessory is a metal plate (4) fixed to the inside surfaces (5) of the flanges (2), the plate being orientated in a plane at right angles to both flanges. The plate extends inwards with its centreline (6) extending along a line bisecting the right angle between the flanges and, as illustrated, the plate may assume the shape very much of an arrow with the

arrow head having its two divergent edges secured to the inside surfaces of the flanges.

5 The metal plate has a pair of slot-like apertures (7) therein and spaced apart along the centreline of the plate from the corner (3). The apertures are configured to receive a flexible strap (8) threaded there through and preferably so that the apertures can be employed, by suitably threading the strap through them, in a self locking manner, as will be quite apparent to those skilled in the art.

10 Referring now more particularly to Figures 3 and 4 of the drawings, a set of four of the accessories described above are generally utilised together in order to locate the four corners of super- and subjacent layers of stacked boxes (9). In order to render the four accessories operational, they are
15 arranged in pairs at diagonally opposite corners on the top of one layer of boxes, or in the case of the palette itself, on the palette (not shown), and the metal plates of the two diagonally opposite accessories are interconnected with a strap (8) as shown most clearly in Figure 4. Once the two straps have been tightened adequately the next layer of boxes is located on top of the
20 subjacent layer with the corners received neatly within the flanges of the accessory that extend upwards.

In this manner a stack of boxes can be rendered extremely stable by having a set of accessories, in the first place, if appropriate, locating a box relative to a palette, as may be necessary, and in the next, locating each super- and subjacent layer of boxes relative to each other, as indicated above.

It will be understood that numerous variations may be made to the embodiment of the invention described above without departing from the scope hereof. In particular, as regards locating the accessories relative to the top of a box of a layer that is to become a subjacent layer for receiving a one or more layers of boxes on top of it, the inside surfaces of the one half of

the flanges could have spikes (10) extending therefrom that could penetrate the outer layer of, for example, a corrugated cardboard carton. The inner surface of the upper half of the flanges could, if required, also be provided with friction affording protrusions (11) that need to be configured so that

- 5 vertical introduction and removal of superjacent boxes is enabled.

The invention therefore provides an extremely simple yet highly effective accessory for enabling stable stacks of boxes to be formed.

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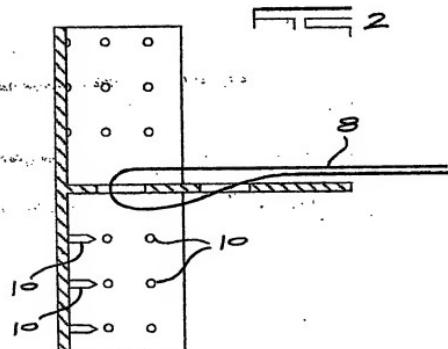
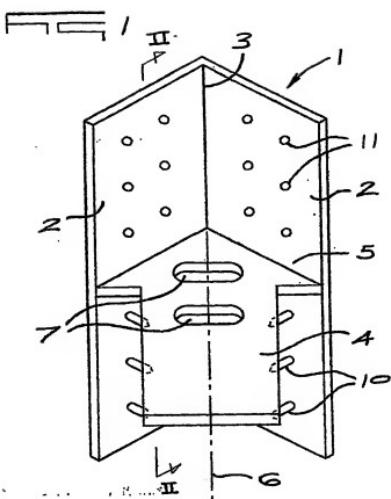
Dated this 26th day of September 2003

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RESEARCH AND DEVELOPMENT

15

applicant

1 - 2003 / 7539

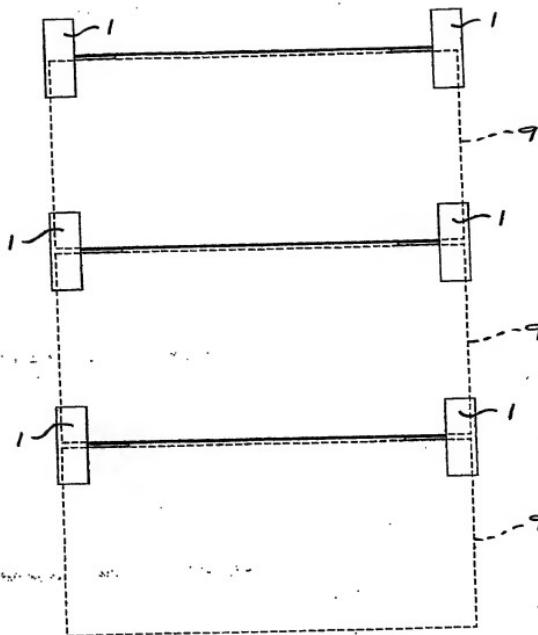


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FIG 3

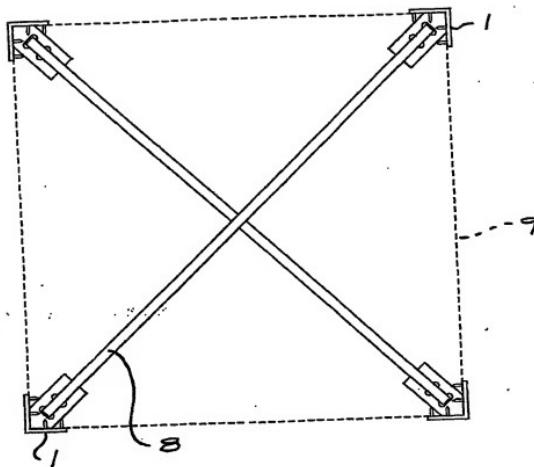


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FIG 4



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